Date: Mon, 4 Apr 94 04:30:28 PDT
From: Ham-Equip Mailing List and Newsgroup <ham-equip@ucsd.edu>
Errors-To: Ham-Equip-Errors@UCSD.Edu
Reply-To: Ham-Equip@UCSD.Edu
Precedence: Bulk
Subject: Ham-Equip Digest V94 #94
To: Ham-Equip

Ham-Equip Digest   Mon, 4 Apr 94   Volume 94 : Issue   94

Today's Topics:

Send Replies or notes for publication to: <Ham-Equip@UCSD.Edu>
Send subscription requests to: <Ham-Equip-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Equip Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-equip".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 3 Apr 94 17:38:40 GMT
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!torn!news.unb.ca!
UNBVM1.CSD.UNB.CA@ucbvax.berkeley.edu
Subject: <none>
To: ham-equip@ucsd.edu

We are trying to make a regulated power supply (suitable for Tx) out
of a computer power supply. It is made by RW, a German manufacturer,
called a PC40 power supply, that will take 110-240 volts, rated at
220 Watts (Part # 380708-02)

Our question is: Is the DC ouput sufficiently regulated to provide
clean RF output out of a radio? Also, can one bank two of these
power supplies in parallel and use the combined output (400 W) to

drive a linear amplifier?

Tnx in advance

Luis Nadeau, VE9LN

Date: 3 Apr 94 17:00:30 GMT
From: agate!usenet.ins.cwru.edu!odin!trier@ucbvax.berkeley.edu
Subject: <none>
To: ham-equip@ucsd.edu

In article <03APR94.14736203.0178@unbvm1.csd.unb.ca>,
NADO000 <NADO@UNB.CA> wrote:
>Our question is: Is the DC ouput sufficiently regulated to provide
>clean RF output out of a radio?

That depends on the details of the supply. You might need to add some
extra supply filtering to get rid of a ~15 kHz switching whine.

An issue that should be of more concern is the voltage and current
ratings. A 200 Watt supply may not be able to supply all of that power
at 12V. A typical PClone supply can put out 35 amps or so at 5V,
perhaps 1.2 A at +12V and 1A at -12V, and a couple hundred milliamps at
-5V. This would be a poor match for a linear amplifier that wants 20
amps or more at 12V. If your supply is something weird that puts out
gobs of power at 12V, perhaps it is a good match. That is unlikely.

A computer supply can reasonable for other purposes. QRP rigs can run
off the 12V 1A output of a PClone power supply. Put an appropriately
sized resistor across the +5V line or else the supply might not be loaded
enough for good regulation.

        Stephen

--
Stephen Trier KB8PWA   "It don't mean a thing if it ain't got that
Other: trier@ins.cwru.edu   certain je ne sais quois."
Home: sct@po.cwru.edu   - Peter Schickele

Date: 3 Apr 1994 17:22:02 -0400
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!news.ans.net!hp81.prod.aol.net!
search01.news.aol.com!not-for-mail@network.ucsd.edu
Subject: >>> Ham Rig Crystals Wanted <<<
To: ham-equip@ucsd.edu

Hi!

I'm looking for crystals for some of
my older ham radios:

Heathkit HW-10 6M AM (Shawnee)
50.300
50.400
(anything else?)

Drake TR-22 2M FM
146.520 simplex
146.580 simplex
146.925/146.325
146.970/146.370
(anything else?)

Also looking to trade computer equipment
(including memory) and misc. electronic
equipment for scanners, ham radio, SSB CB,
etc.

Please Email to: RobB873302@aol.com

THANKS! - Rob

Date: 3 Apr 94 19:23:15 GMT
From: dog.ee.lbl.gov!agate!news.Brown.EDU!noc.near.net!news.delphi.com!
usenet@ucbvax.berkeley.edu
Subject: ?Best HF transceiver $500-$750 range-Advice?
To: ham-equip@ucsd.edu

Gary Coffman <gary@ke4zv.atl.ga.us> writes:

>I have the IC-735. It's a delightful little rig. 100 watts, very good
>thermal design, general coverage receiver, and easy to use. You won't
>go wrong with one of these.
>
>Gary

Ditto from me, Gary. A good friend is delighted with his IC-735 and I am
extremely pleased with my IC-725 for mobile and IC-745 at home.

73, KG7BK, CecilMoore@delphi.com

Date: Sun, 3 Apr 1994 15:26:31 GMT
From: spsgate!mogate!newsgate!NewsWatcher!user@uunet.uu.net
Subject: Distorted Audio on Yaesu FT-530
To: ham-equip@ucsd.edu

In article <meike-310394140229@mac-142.interval.com>, meike@interval.com
(Roger Meike) wrote:

>
> I just got an FT-530 yesterday. Its a great rig, but I was kind of annoyed
> to find out that the audio distorted quite badly when I turned the volume
> up loud enough to be heard in a moving car (admittedly this was most of the
> way up, but the distortion was suddenly quite annoying). Even the optional
> speaker/mic wasn't much better. Has anyone else out there had a similar
> experience, or do I have a defective unit that I should return.
>
> Thanks,
> -roger
>
> _____________________________________
> R o g e r   M e i k e
> meike@interval.com
> Interval Research Corp.

Roger:

I have the same problem with my wife's 530. The problem seems to be with
the speaker (or rather, the lack of it). When I plug the radio into an
external speaker, there is more than enough audio. I guess that this is
just another tradeoff to get the size down some more.
73,
Mike Blackwell, WD5BQH

Date: Sun, 3 Apr 1994 14:08:06 GMT
From: ihnp4.ucsd.edu!swrinde!emory!wa4mei!ke4zv!gary@network.ucsd.edu
Subject: Distorted Audio on Yaesu FT-530
To: ham-equip@ucsd.edu

In article <meike-310394140229@mac-142.interval.com> meike@interval.com (Roger
Meike) writes:
>
>I just got an FT-530 yesterday. Its a great rig, but I was kind of annoyed
>to find out that the audio distorted quite badly when I turned the volume
>up loud enough to be heard in a moving car (admittedly this was most of the

>way up, but the distortion was suddenly quite annoying). Even the optional
>speaker/mic wasn't much better. Has anyone else out there had a similar
>experience, or do I have a defective unit that I should return.

This is typical. The dime sized speakers used in HTs and speaker-mikes
just can't deliver the volume you need in a car. Get an external speaker,
4-5 inch size, and plug that into the radio. You will then have audio
loud enough to annoy the kids with the boomboxes without objectionable
distortion.

Gary
--

Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

Date: Sun, 3 Apr 1994 13:31:53 GMT
From: ihnp4.ucsd.edu!swrinde!gatech!wa4mei!ke4zv!gary@network.ucsd.edu
Subject: How phasing SSB Exciters Work (Was: RF and AF speech processors)
To: ham-equip@ucsd.edu

In article <CnJrA3.1I3@srgenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:
>Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
[chart deleted]
>: Now this chart illustrates the problem I've been talking about. As
>: we can see, the difference in delay with frequency is quite marked.
>: Sure the phase delay increases *smoothly* with frequency delta, but
>: the magnitude of the error rapidly climbs with increasing frequency
>: delta. This is our old friend click-boom.   ...
>
>Other people besided Gary may be confused by this, so I'll post an
>explanation.

I'm not confused. I calculated the delays based on the graph you posted.
Delay equals the reciprocal of frequency times the total phase delay in
degrees divided by 360.

>The graph above plots phase, not delay. A constant delay results in
>a constantly-rising phase plot. For example, a 1 millisecond delay
>is 36 degrees at 100 Hz, 360 degrees at 1000 Hz, 3600 degrees at
>10,000 Hz, etc.

Yeah, but that isn't what your graph showed.

>While the plot above looks like a straight line, it really isn't because

>of the logarithmic x-axis.

Bingo! I check plotted it on semi-log paper then replotted on a linear graph from which I calculated my differential delay numbers.

>However, as the chart that Tom Bruhns posted of
>a typical phase-shift network shows, it really isn't too bad. His chart
>shows that between 400 and 2786 Hz, the maximum phase error from a straight
>line varies smoothly between +17.2 to -20.9 degrees, which is far better
>than you would get with a typical transceiver-type crystal filter.

As I commented, his table looked much better than your graph, and I calculated differential delays based on it too that were nearly 10 times smaller. It's just that I've seen phase plots for crystal and mechanical filters which, *away from the edges*, where Tom's table looked bad too, looked at least as good as Tom's phase shifter. And note also that the network Tom modelled is not "typical", it is considerably more complex than the traditional Dome based networks. They tend to really suck in the differential delay department because they're based on the same simple semi-log response as your graph. I don't think he included an AF pre-filter in the table either.

I'll readily agree that the receiver type filters used in many ham rigs for SSB transmit signal generation, suck wind. But that's a different issue. Good filter designs are available, as witness filters we use for VSB video, and in certain telco FDM equipment that have a maximally flat phase response in the passband. We simply can't tolerate differential delay in video systems, yet we use filters instead of phasing to generate VSB signals. It's not a matter of economy, it's what works best.

Gary
--

Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

Date: Sun, 3 Apr 94 15:53:00 -0400
From: pa.dec.com!dayton.wright.edu!ad426@decwrl.dec.com
Subject: HR2510 mods
To: ham-equip@ucsd.edu

I am looking for mods for a HR2510. Specifically, mods for converting the radio to get the 100 khz split from the transmit to the receive to use on FM 10M repeaters.

Date: 4 Apr 1994 03:08:09 -0400
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!howland.reston.ans.net!
usenet.ins.cwru.edu!news.ysu.edu!malgudi.oar.net!news.ans.net!hp81.prod.aol.net!
search01.news.aol.com!not-for-mail@network.
Subject: HTX-202 Sale!
To: ham-equip@ucsd.edu

In article <1994Mar30.214843.16469@wmichgw>, x92verma@wmich.edu writes:

I think you have to wait until you have your license in hand. There was a lot
of talk about letting new hams go on the air with just the Cerificate of
Successful Completion of Examination. I don't believe that was approved yet so
I would wait until the ticket arrives.

Date: Sun, 3 Apr 1994 20:15:08 GMT
From: netcomsv!netcom.com!wy1z@decwrl.dec.com
Subject: New User needs Help with Packet and Mac
To: ham-equip@ucsd.edu

In article <kleite-020494213032@155.95.178.235>,
Keith J. Leite <kleite@sentry.ndhm.gtegsc.com> wrote:
>In article <sunger-280394094435@sunger.tor.hookup.net>, sunger@hookup.net
>(Steve Unger) wrote:
>
>> Hello:
>>
>> Can any one tell me where to look for software for the Mac for using packet
>> radio over tcp/ip?
>>
>KL> Steve,
>KL> I am presently using my Mac SE/30 on packet, I am using a program
>called
>KL> Net/Mac this is a TCP/IP NOS program, there is also a mailer program
>which
>KL> is IM/Mailer ...both of these programs can be found by FTPing into
>UCSD.EDU
>KL> they have the most recent version's of this software. I have been
>running
>KL> it for a year now and it works great !!!, I think the directory you
>will
>KL> find it in is hamradio\packet\tcpip\incoming ...any probs send me a
>message.
>KL>

>KL>
>KL> 73 de Keith
>
>***
>   Keith J Leite KA1AQB
>   AX25 - KA1AQB @ WA1PHY.#EMA.MA.USA.NA
>   AMPR - ka1aqb@switch.sema.ampr.org
> Internet - kleite@sentry.ndhm.gtegsc.com
>
>***

There is also a lot of good packet stuff on
oak.oakland.edu:/pub/hamradio/mac/digital

73,
Scott

--

==
| Scott Ehrlich   Amateur Radio: wy1z   AMPRnet: wy1z@wa1phy.ampr.org |
Internet: wy1z@neu.edu   BITnet: wy1z@NUHUB   AX.25: wy1z@wa1phy.ma.usa.na
Maintainer of the Boston Amateur Radio Club hamradio FTP area on
oak.oakland.edu:/pub/hamradio
==

Date: Mon, 4 Apr 1994 05:12:29 GMT
From: usenet.elf.com!ci-pioneer!hodain!hugh@uunet.uu.net
Subject: Trouble with SW bands on Drake R8 Receiver
To: ham-equip@ucsd.edu

Hello all,

My infirm father-in-law has a Drake R8 Communications Receiver which
he has been using for a couple of years to scan the short-wave bands.
Recently, he has been unable to receive anything on the SW bands, even
though other bands are apparently ok. He believes his antennas are
not to blame since they work for the other bands. So, (hastily) he's
concluded that a lightning strike has "taken-out" his SW tuning
section, and he's preparing to pack up the unit and send it back to
the manufacturer for a repair.

Before he gets stuck with shipping and repair costs I'd like some

feedback from other users of the Drake R8 on the possibility of other reasons for the failure on the SW bands. According to his wife, there hasn't been an electrical storm since the SW bands were last coming in; she wonders if the problem couldn't be simpler. And, though aware of the quirks of lightning and high-voltage spikes, I too am slightly skeptical that only one section of the receiver would be wiped out. Perhaps the problem is not so serious as to require a factory repair.

Any relevant information about common failure modes of this unit, user bewares, horror stories, etc will be appreciated. Though not a ham, I'm handy handy with electronics and could easily perform a few tests with the cover off if needed.

E-mail or news is fine.

Thanks very much in advance.

Hugh
--
Hugh Secker-Walker | hugh@hodain.ci.net (NeXTmail ok)
Perceptual Acoustics | hugh@ear.mit.edu

Date: 4 Apr 94 00:36:36 GMT
From: dog.ee.lbl.gov!agate!iat.holonet.net!rohrwerk@ucbvax.berkeley.edu
To: ham-equip@ucsd.edu

References <1994Mar29.160241.20722@ke4zv.atl.ga.us>,
<CnG3Jt.Htw@srgenprp.sr.hp.com>, <2nahmv$9q9@hpscit.sc.hp.com>
Subject : Re: How phasing SSB Exciters Work (Was: RF and AF speech processors)

rkarlqu@scd.hp.com (Richard Karlquist) writes:

>In any event, if the receiver is a transceiver, and it uses
>the same filter for receive and transmit, then all the nasty
>ripples you avoided with a phasing type transmitter will
>be reintroduced at the receiver. So you really need a phasing
>transmitter and phasing receiver to get "hi-fi" audio. Or

Like the Campbell R2 receiver, Jan. 1993 QST! For whatever combination of reasons, it IS a clean sounding unit. I'll bet his companion phasing SSB exciter sounds just as good.

John K0JD

End of Ham-Equip Digest V94 #94
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